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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/812,770	03/20/2001	Douglas C. Dahlby	015685.P091	8877
45222	7590	02/23/2006	EXAMINER	
ARRAYCOMM/BLAKELY 12400 WILSHIRE BLVD SEVENTH FLOOR LOS ANGELES, CA 90025-1030			PIZARRO, RICARDO M	
			ART UNIT	PAPER NUMBER
			2662	

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/812,770	Applicant(s) DAHLBY ET AL.	
	Examiner Ricardo Pizarro	Art Unit 2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

FINAL ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 5-7 , 8, 12, 14-16, 17-18, 20-21,24- 25 and 27- 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent No. 6,366,779 (Bender) in view of US patent No. 6,738,638 (Mousley) .

Regarding claims 1 and 12, Bender discloses Method and apparatus for rapid assignment of a traffic channel, comprising a method for opening a communications stream between a user terminal 102 in Fig. 1) and a base station (104 in Fig. 1) in a communications system comprising: registering the base station and the user terminal with each other by exchanging identification information and configuration information (col 7 lines 60-65), sending a request in an uplink access slot to open a communications stream message from the user terminal to the base station (mobile terminal send a channel request message 204 in Fig. 2, col 9 line 8 and 26-28), receiving a channel assignment message in a downlink access slot from the base station in response to the request message (base station transmits a channel assignment message , col 10 line 18), the channel assignment message including an identification of an assigned communications channel for the communications stream

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(col 10 lines 37-45), sending data over the assigned communications channel in a frame following the frame in which the request message was sent (upon sending a request message in a frame and receiving a channel assignment message communications would take place in the following frame); a computer machine readable medium (TE 108 in Fig. 1, col 6 lines 31-34), as in claim 12.

Regarding claims 17 and 24 Bender discloses registering a base station and the user terminal with each other by exchanging identification information and configuration information (col 7 lines 60-65) receiving a request message in an uplink access slot to open a communications stream message at the base station from the user terminal (channel request message 204 in Fig. 2, col 9 line 8 and 26-28), sending a channel assignment message from the base station in a downlink in response to the request message (channel assignment message , col 10 line 18) , the channel assignment message including an identification of an assigned channel from the stream and receiving data from the user terminal stream (col 10 lines 37-45) and sending data from the base station over the assigned communication channel (by activating the session); a computer machine readable medium (TE 108 in Fig. 1, col 6 lines 31-34), as in claim 24.

Bender do not specifically disclose the uplink and downlink frames being TDMA frames as in claims 1, 12 , 17 and 24.

However Mousley discloses a radio communication system where the uplink an downlink transmission frames are TDMA frames (col 5 lines 40-45) , as in claims 1, 12, 17 and 24.

Therefore it would have been obvious to one of ordinary skill in the art to provide the uplink and downlink TDMA frames as in Mousley to the system disclosed by Bender for the system to be able to have the sets of sequential time periods used by the base stations coordinated so that interference among terminal is avoided.

The motivation to do so is to provide the user a system with reduced interference.

Regarding claim 3, Bender discloses wherein the request comprises an identification of the registration information (col 7 lines 66-67) .

Regarding claims 5, 15, 20 and 27 , Bender discloses wherein sending the request message comprises sending the request message on a random access channel that is shared by other terminals (mobile stations normally share RACH , col 8 line 16) .

Regarding claim 6, Bender discloses wherein the random access channel is assigned to the user terminal during registering (mobile stations transmit on the access channel using a random access procedure, col 8 line 23).

Regarding claim 7, Bender discloses wherein , the configuration information includes information regarding the capabilities and communications environment of the user terminal (col 7 lines 65-67).

Regarding claim 8, Bender discloses wherein the request message includes information about the transmission power of the request message(col 9 lines 26-27). and wherein the channel assignment message includes information about transmission

power of the remote for use on the assigned communications channel (col 10 lines 40-45)

Regarding claim 14, Bender discloses wherein the request comprises an identification of the registration information (transaction identifier, col 9 line 26).

Regarding claim 16, Bender discloses wherein the request message includes information about the transmission power of the request message and wherein the channel assignment message includes information about the transmission power for use on the assigned communications channel ((col 10 lines 40-45)

Regarding claim 18, Bender discloses wherein the request comprises an identification of the registration information (col 7 line 66) .

Regarding claim 21, Bender discloses wherein the configuration information includes information regarding the capabilities and communications environment of the user terminal (Physical layer 310 in Fig. 3 includes transmission characteristics).

Regarding claim 25, Bender discloses wherein the request comprises an identification of the registration information ((col 7 lines 65-67).

Regarding claim 28, Bender discloses wherein the configuration information includes information regarding the capabilities and communications environment of the user terminal (takes place during registration wherein MS identifies itself, col 7 line 65)

3. Claim 9 is rejected under 35 U.S.C 103(a) as being unpatentable over US patent No. 6,366,779 (Bender) and US patent No. 6,738,638 (Mousley) and further in view of US 6,804,212 (Vollstrom).

Bender and Mousley do not disclose the channel assignment message including a timing correction for the user terminal to apply when sending data over the assigned communications channel .

However Vollstrom discloses a method for and arrangement for establishing a connection, comprising a channel assignment message including a timing correction for the user terminal to apply when sending data over the assigned communications channel (col 5 lines 43-45).

Therefore it would have been obvious to one of ordinary to combine the assignment message including timing correction to the system disclosed by Bender and Mousley in order to timely start the use of the traffic channel assigned by the BS.

The motivation to do so is to provide a system for rapidly and timely assign traffic channels in digital wireless high speed packet data communications system

4. Claim 10 is rejected under 35 U.S.C 103(a) as being unpatentable over US patent No. 6,366,779 (Bender) and US patent No. 6,738,638 (Mousley) and further in view of US 6,804,219 (Koo).

Bender and Mousley do not disclose , sending a further request to open a further communications stream e from the user terminal to the base station , receiving a further channel assignment message t from the base station in response to the further request message , the further channel assignment message including an identification of a further assigned communications channel for the further

communications stream and sending data over the further assigned communications channel .

However Koo discloses a Data transmission system comprising sending a further request message (Supplemental channel request message 330 in Fig. 3) to open a further communication channel from the user terminal to the base station over the assigned communication channel (In the first request message a DTCH channel has been assigned and all data is transmitted over that channel, col 4 lines 34-36) , receiving a further channel assignment message from the base station in response to the further request message (Extended supplemental channel assignment message 340 in Fig. 3, col 4 line 47) including an identification of the further assigned channel, sending data over the further assigned channel(SCH channel is further assigned, assignment message provides information about the channel characteristics) , as in claim 10 .

Therefore it would have been obvious to one of ordinary skill in the art to provide the further request message as in Koo to the system disclosed by Bender for the system to have additional bandwidth to transmit and be able to do so more rapidly.

The motivation to do so is to provide a system for rapidly assigning traffic channel in digital wireless high speed packet data communications system

5. Claims 2, 4 and 11, 13 , 19, 22-23, 26, 29 are rejected under 35 U.S.C 103(a) as being unpatentable over US patent No. 6,366,779 (Bender) and US patent No. 6,738,638 (Mousley) and further in view of US patent No. 5,729,541

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(Hamalainen).

Regarding claim 2, 13 and 23, Bender and Mousley do not specifically disclose receiving data to transmit at a buffer in the user terminal and sending a request .

However Hamalainen discloses a system for transmitting packet data in a TDMA systems comprising receiving data to transmit at a buffer in the user terminal and terminal responding upon receipt (Fig. 13, if BS has transmitted data to MS and buffer is full , immediately after this a channel request message is sent, col 9 lines 25-28 and 33-34) as in claims 2, 13 and 23.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to provide the systems disclosed by Bender and Mousley with the request means as disclosed by Hamalainen in order to adequately and timely use assignment of transmission channels in the network,

The motivation to do so is to provide a system that is able to rapidly assign traffic channels in a cellular network .

Regarding claims 4, 19 and 26 Bender and Mousley do not specifically disclose a training sequence.

However Hamalainen discloses a system for assigning channels for wireless communications comprising a training sequence to assist the BS (col 8 lines 47-50), as in claims 4, 19 and 26

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to provide the systems disclosed by Bender and Mousley with

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the training sequence as disclosed by Hamalainen in order to better assist the BS during transmission.

The motivation to do so is to provide a system that performs channel assignment including collision management (col 8 lines 49-52)

Regarding claims 11, 22 and 29 ,Bender and Mousley do not specifically disclose receiving a page from the BS and sending the request message in response to said page..

However Hamalainen discloses a system for assigning channels for wireless communications comprising receiving a page from the BS and sending a message in response to said page (col 9 lines 39-45) as in claims 11, 22 and 29.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to provide the systems disclosed by Bender and Mousley with the paging system as disclosed by Hamalainen in order to adequately and timely use assignment of transmission channels in the network,

The motivation to do so is to provide a system that is able to rapidly assign traffic channels in a cellular network .

Response to Arguments

6. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any response to this final action should be mailed to:

Box AF

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(571) 273-8300

.(for formal communications; please mark "EXPEDITED PROCEDURE", for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to 22- 20th Street S, Crystal Plaza Two, Lobby, Room 1B03, Arlington , VA 22202 (Customer window).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Ricardo Pizarro** whose telephone number is **(571) 272-3077**. The examiner can normally be reached on Monday-Thursday from 9:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Hassan Kizou** can be reached on (571) 272-3088.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

2/15/06
Ricardo Pizarro



HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600